

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P801683/WO/1	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/004757	International filing date (day/month/year) 05.05.2004	Priority date (day/month/year) 05.06.2003
International Patent Classification (IPC) or national classification and IPC		
<p>Applicant DAIMLERCHRYSLER AG</p>		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>12</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/004757

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

international search (Rule 12.3 and 23.1(b))
 publication of the international application (Rule 12.4)
 international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

the international application as originally filed/furnished
 the description:

pages 1, 10-16 as originally filed/furnished

pages* 1a, 2-9 received by this Authority on 19.03.2005 with letter of 16.03.2005

pages* _____ received by this Authority on _____

the claims:

nos. _____ as originally filed/furnished

nos.* _____ as amended (together with any statement) under Article 19 19.03.2005 with letter

nos.* 1-6 received by this Authority on of 16.03.2005

nos.* _____ received by this Authority on _____

the drawings:

sheets 1/2, 2/2 / figures 1, 2 as originally filed/furnished

sheets* _____ received by this Authority on _____

sheets* _____ received by this Authority on _____

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. The amendments have resulted in the cancellation of:

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (specify): _____
 any table(s) related to sequence listing (specify): _____

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (specify): _____
 any table(s) related to sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/004757

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-6	YES
	Claims		NO
Inventive step (IS)	Claims	1-6	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-6	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

1) Closest prior art: Document US-A-0 5411 450 (D1)

discloses a method for operating a drive train with an automatic gearbox and a non-power-shiftable power divider that is actuated by an external force, corresponding to the features of the preamble of claim 1. Before the power divider shifts gear, the frictional connection between the drive machine and the power divider is automatically interrupted. When gear shifting is completed, the frictional connection is automatically restored.

2) Main differences with respect to said prior art:

In accordance with the features of the characterising portion of claim 1. The control device is used to:

- a) monitor vehicle speed during gear shifting;
- b) control the braking system as a function of a result of the monitoring;
- c) calculate an engine speed after the power divider has shifted gear and, as a function thereof, carry out a gear shift in the automatic gearbox or suppress the request (from the power divider) for a gear shift.

The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

3) Problem: To ensure an especially secure and comfortable operation of the vehicle and prevent

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/004757

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

unmonitored operation.

4) Solution: The solution to this problem proposed in claim 1 involves an inventive step (PCT Article 33(3)). Features a) and b) as per point 2 above ensure that, despite the open drive train, the motion of the vehicle can be actively influenced. At the same time, feature c) enables a large proportion of the gear shifts requested by the power divider to be carried out. However, the drive machine is prevented from being in an unpermitted operating state after the gear shift has been made. Such a method cannot be derived obviously from one or more of the cited documents.

Claims 2-6 are dependent on claim 1 and therefore likewise meet the PCT novelty and inventive step requirements.